

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A pharmaceutical product distribution system, comprising:
an activation computer configured to store authentication codes in a database and associate said authentication codes with pharmaceutical packages, wherein said activation computer is further configured to activate said authentication codes for pharmaceutical packages that are being sent to destination sites; and
an authentication computer configured to receive authentication codes that are read from pharmaceutical packages received at said destination sites and determine whether said authentication codes have been activated;
wherein the authentication computer is configured to flag said activated authentication code as expired in response to a successful verification of said authentication code.
2. (Original) The system of Claim 1, wherein said activation computer is configured to store additional information for said pharmaceutical packages in said database along with said activated authentication code.
3. (Original) The system of Claim 2, wherein the authentication computer is configured to determine whether information received in connection with an authentication code corresponds to the additional information stored at said database.
4. (Original) The system of Claim 2, wherein said additional information includes at least one of: pharmaceutical package destination information, pharmaceutical type, pharmaceutical quantity, pharmaceutical dosage, or pharmaceutical manufacturer information.
5. (Original) The system of Claim 1, wherein the authentication code is a machine readable code.
6. (Original) The system of Claim 5, wherein said authentication computer is configured to receive authentication codes from a code reader.
7. (Original) The system of Claim 1, further comprising a server in communication with said database, said activation computer, and said authentication computer, wherein said server transmits an activated authentication code to said authentication computer, and said authentication computer is configured to store the activated authentication code received from said server.

8. (Original) The system of Claim 2, wherein said additional information comprises the intended destination of said pharmaceutical packages.

9. (Original) The system of Claim 8, wherein the intended destination includes intermediate and final destination information.

10. (Original) The system of Claim 1, wherein said authentication computer is configured to notify said activation computer in response to determining that a received authentication code corresponding to a pharmaceutical package is not an activated authentication code.

11. (Currently amended) A computerized method of tracking and authenticating pharmaceutical products from an origin location to a destination site, the method comprising:

correlating a unique authentication code with a pharmaceutical product package and additional product distribution information;

storing said authentication code and additional product distribution information to a database storage;

activating said unique stored authentication code to indicate that said pharmaceutical package is being sent to a destination site;

reading, from a computer memory, the unique authentication code at said destination site;

verifying the read authentication code and additional product distribution information with said database storage;

notifying said system server whether said verification was successful; and

expiring said activated stored authentication code in response to a successful verification of said authentication code;

wherein the method is performed by one or more computing devices.

12. (Original) The method of Claim 11, wherein said additional product distribution information includes at least one of destination information for a pharmaceutical product, manufacturer information for said product, receiving location information, product type, or product quantity.

13. (Original) The method of Claim 11, wherein said additional product distribution information is stored in a computer at said destination site.

14. (Original) The method of Claim 11, wherein said additional information is input by a user.

15. (Original) The method of Claim 11, wherein verifying further comprises:
 sending an authentication request, said authentication code read from said product packaging and said additional product distribution information to a system server,
 determining, in response to said authentication request, whether said authentication code read from said product packaging was an activated authentication code, and
 notifying said system server of the result of said determination.

16. (Original) The method of Claim 11, wherein verifying the read authentication code and additional product distribution information with said database comprises sending encoded data to said database.

17. (Currently amended) A pharmaceutical product distribution system, comprising:
 a system server including a first authentication module;
 a first code reader configured to read authentication codes from product packaging; and
 an activation module configured to receive an authentication code read by said first code reader from product packaging prior to distribution, and to transmit an activation request to the system server, wherein said activation request comprises the authentication code read by said first code reader, and wherein the system server stores the authentication code as an active authentication code in response to the activation request;

wherein the activation module is configured to deactivate said active authentication code in response to a successful verification of said authentication code.

18. (Original) The distribution system of Claim 17, further comprising at least a second code reader configured to read authentication codes from product packaging, and a second authentication module, configured to receive an authentication code read by said second code reader from product packaging and active authentication codes from said system server, and configured to determine whether said authentication code read by said second code reader corresponds to said active authentication code received from said system server, and to notify a

user of said second code reader as to whether the authentication code read by said second code reader corresponds to said active authentication code.

19. (Original) The distribution system of Claim 18, wherein said second authentication module is further configured to transmit a verification request and said authentication code read by said second code reader to said system server, wherein said first authentication module is further configured to determine whether said authentication code received with said authentication request corresponds to an active authentication code stored at said system server, and wherein the first authentication module is configured to notify said second authentication module as to whether said authentication code received with said verification request corresponds to an active authentication code.

20. (Original) The distribution system of Claim 17, wherein said activation request includes destination information for the product, said destination information is stored at the system server in connection with the active authentication code, said second authentication module is configured to receive said destination information from said system server with said active authentication code, and said second authentication module is further configured to determine whether information at said second code reader corresponds to said destination information received from said system server.

21. (Original) The distribution system of Claim 20, wherein said destination information includes intermediate destination information and final destination information.

22. (Original) The distribution system of Claim 18, wherein said first authentication module is configured to store said previously active authentication code as an expired authentication code when said second authentication module determines that said authentication module read by said second code reader corresponds to said active authentication module.

23. (Original) The distribution system of Claim 17, wherein said activation module is further configured to encode said activation request, and to transmit said encoded activation module to said system server, and wherein said system server is configured to decode said encoded activation request.

24. (Currently amended) A method of tracking and authenticating pharmaceutical products from an origin location to a final destination, comprising:

applying an authentication code to product packaging;

reading, from a computer memory, the authentication code from the product packaging at the origin location prior to distribution;

sending an activation request to a system server, wherein said activation request includes the read authentication code; and

activating the read authentication code in response to the activation request, comprising storing the read authentication code as an active authentication code at the system server;

flagging said active authentication code as expired in response to a successful verification of said authentication code;

wherein the method is performed by one or more computing devices.

25. (Original) The method of Claim 24, further comprising:

sending the active authentication code to a product receiving location;

reading an authentication code from product packaging received at a receiving location;

determining whether said authentication code read at said receiving location corresponds to said active authentication code; and

notifying a user of the result of said determination.

26. (Original) The method of Claim 25, further comprising sending a verification request and said authentication code read at said receiving location to said system server, determining whether said authentication code read at said receiving location corresponds to an active authentication code stored at said system server, and notifying the receiving location as to whether the authentication code read from product packaging at the receiving location corresponds to an active authentication code stored at the system server.

27. (Original) The method of Claim 25, further comprising expiring the active authentication code in response to determining that the authentication code read at the receiving location corresponds to the active authentication code, wherein expiring comprises storing the active authentication code at the system server as an expired authentication code.

28. (Original) The method of Claim 24, wherein said activation request includes destination information for the product, and wherein activating further comprises storing said destination information in connection with said active authentication code.

29. (Original) The method of Claim 24, wherein said activation request includes destination information for the product, wherein activating further comprises storing said destination information in connection with said active authentication code at said system server, and wherein the method further comprises sending said destination information to a receiving location, determining whether receiving location information corresponds to said destination information from said system server, and notifying the receiving location as to whether the receiving location information corresponds to said destination information.

30. (Original) The method of Claim 24, further comprising encoding said activation request, sending said encoded activation request to said system server, and decoding said encoded activation request at said server prior to said activating.

31. (Currently amended) A method of tracking and authenticating pharmaceutical products from an origin location to a final destination, comprising:

reading an authentication code from a product packaging at said origin location prior to distribution;

sending an activation request, said read authentication code, and product destination information to a system server;

activating said read authentication code in response to said activation request, comprising storing said read authentication code as an active authentication code and said product destination information at said system server;

reading, from a computer memory, an authentication code from product packaging received at a receiving location;

sending a verification request and said authentication code read at said receiving location to said system server;

verifying said authentication request, comprising comparing said authentication code read from product packaging at said receiving location to active stored authentication codes stored at the system server;

notifying said receiving location whether said authentication request was verified, comprising indicating whether said authentication code read from product packaging at said receiving location corresponds to said active stored authentication code; and

expiring said active stored authentication code by storing said active authentication code at said system server as an expired authentication code;
wherein the method is performed by one or more computing devices.

32. (Original) The method of Claim 31, wherein said activation request further comprises destination information, said method further comprises storing said destination information at said system server, said verification request further comprises receiving location information, said verifying said authentication request further comprises comparing said receiving location information to said destination information, and said notifying said receiving location further comprises indicating whether said receiving location information corresponds to said destination information stored at said server.